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ORIGINAL ARTICLES

CONGENITAL AND ACQUIRED ENURESIS FROM  
SPINAL LESION.

(a) MYELODYSPLASIA. (b) STRETCHING OF THE  
CAUDA EQUINA.

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**MYELODYSPLASIA.** Under the name of myelodysplasia, Alfred Fuchs,<sup>1</sup> in 1909, described anomalies of development, and enuresis nocturna, associated often with spina bifida occulta, and depending on imperfect development of the lower part of the cord. The important features of this condition are:

1. Weakness of the sphincters and especially enuresis nocturna persisting after puberty.
2. Syndactylyism between the second and third toes, more rarely between the second, third, and fourth toes, still more rarely between the other toes; usually bilateral.
3. Disturbances of sensation, chiefly of temperature sensation, not strictly radicular in type, especially in the feet and more frequently only in the toes.
4. Defect of the sacral canal recognized by the Roentgen-rays.
5. Anomalies of cutaneous and tendon reflexes in the abdomen and lower limbs.
6. Defects in the feet in many cases (pes planus, varus, valgus), sometimes with peroneus weakness, also trophic and vasomotor disturbances in the toes.

<sup>1</sup> Wien. med. Wochschr., 1909, p. 2141.  
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Other anomalies that should be sought for are hypertrichosis of the sacral region, lipoma in the coccygeal region, asymmetry of the rima ani, fovea coccygea, or fistula-like depression of the sacrococcygeal region.

Mattauschek studied with Fuchs 24 adults with enuresis (20 soldiers and 4 civilians) and found anomalies in 21, which seemed to indicate hypoplasia of the conus.

Peritz and Saar observed by means of the Roentgen rays in 20 adults with enuresis and 20 children afflicted with the same disorder that 68 per cent. of the adults and 35 per cent. of the children had spina bifida occulta.

Lewandowsky has objected that spina bifida and enuresis are merely associated conditions (cited by Vorkastner).<sup>2</sup>

Peritz<sup>3</sup> believes that these conditions occurring in the same person have a relation to one another, because anomalies of the sacrum are found in 68.2 per cent. of cases of enuresis in adults; because of thermo-anesthesia on the plantar surface of the toes, and of anomalies in the reflexes with enuresis. He states that 50 to 55 per cent. of children who have enuresis nocturna have it because of myelodysplasia.

Alfred Saenger,<sup>4</sup> since the report made by Fuchs, has examined every case of enuresis nocturna with roentgenographs, but has found only one in which myelodysplasia existed. His patient was a girl, aged eighteen years, who had complained of nocturnal enuresis a long time. She had no difficulty in holding the urine during the day. The enuresis had increased in later years. The right Achilles reflex was absent, a zone of diminished sensation in all forms was about the anus, and the Roentgen-ray picture revealed a defect of the sacrum.

Most cases of enuresis nocturna, he thinks, can not be attributed to myelodysplasia.

An unsigned (except for the initials J. C.) review of the myelodysplasia of Fuchs has been published recently in the *Archiv. de méd. des enfants*, August, 1915. Reference is made to three observations recently reported by C. Bonorino-Udaondo and Mariano R. Castex.<sup>5</sup> As these cases were observed in Buenos Aires and are published in an inaccessible journal I have abstracted them from the review.

**CASE I.**—Boy, aged fourteen years, had nocturnal and diurnal incontinence of urine since early infancy. The diurnal incontinence disappeared about the age of six or seven years, but the nocturnal incontinence persisted, and occurred only in sleep. He had certain malformations, cephalic and facial hypertrichosis, ogival palate,

<sup>2</sup> Handbuch der Neurologie, Lewandowsky.

<sup>3</sup> Deutsch. med. Wchnschr., July 6, 1911, p. 1256.

<sup>4</sup> Deutsch. Ztschr. f. Nervenheh., xlvi and xlvii, 694.

<sup>5</sup> Review de la Soc. méd. Argentina, November and December, 1914.

coughed or exerted himself the urine would escape. This condition became worse gradually until he had no control of the bladder, and was obliged to wear a urinal. Sexual desire was not weakened, but the dribbling of the urine prevented the sexual act. The rectal sphincter functionated feebly and a call to stool was urgent. His gait and station were good. The lower limbs were well developed, but the man felt weaker than before the accident. The left side of the scrotum, the left side of the perineum, and the left buttock near the anus had fully normal sensation to touch and pin prick; whereas the right side of the scrotum except the upper outer portion, the right buttock in a small area near the anus, and to a less degree the right side of the perineum, showed diminished sensation to touch and pin prick. The right side of the penis also was less sensitive than the left side. The sensation of the testicles was normal. The patellar reflexes were prompt but the Achilles reflexes were slight. Babinski's sign was not present. The upper part of the body was not affected. The lesion seemed to be in the lower sacral roots, and may have been confined to one side because of the unilaterality of the disturbance of sensation in the supply of these roots. This unilaterality seemed to indicate that the lesion was not in the conus. The cause of the symptoms was probably stretching of the lower sacral roots of one side by excessive straining in lifting a heavy weight while bending forward.

#### **GELATINOID CARCINOMA (MORBUS GELATINOSUS) OF THE PERITONEUM.<sup>1</sup>**

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THE special interest in this case is concerned with several points: (1) It is an example of ascites existing over a long period and requiring a large number of tappings. (2) The problem of diagnosis. (3) The character of the peritoneal fluid. (4) The interpretation of the autopsy findings.

The history is as follows: G. B., a colored man, aged thirty-eight years, a butcher by occupation, was admitted to the Jefferson Hospital first on February 21, 1911.

<sup>1</sup> Read at the meeting of the Association of American Physicians, May, 1915.